## TRANSMURAL ABLATION DEVICE WITH INTEGRAL EKG SENSOR

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## CROSS REFERENCE TO RELATED APPLICATION

This application is a continuation-in-part of now u.s. Patapplication Serial No. 09/844,225 filed April 27, 2001, No. 4517,536 which is a continuation in part of application Serial No. now u.s. Pat No. 6546,936 09/747,609 December 22, 2000, Nowhich claims the benefit of provisional application Serial No. 60/200,072, filed April 27, 2000.

## BACKGROUND OF THE INVENTION

Atrial fibrillation is the most common heart arrhythmia in the world, affecting over 2.5 million people in the United States alone. Ablation of cardiac tissue, in order to create scar tissue that poses an interruption in the path of the errant electrical impulses in the heart tissue, is a commonly performed procedure to treat cardiac arrhythmias. Such ablation may range from the ablation of a small area of heart tissue to a series of ablations forming a strategic placement of incisions in both atria to stop the conduction and formation of errant impulses.

Ablation has been achieved or suggested using a variety of techniques, such as freezing via cryogenic probe, heating via RF energy, surgical cutting and other techniques. As used here, "ablation" means the removal or destruction of the function of a body part, such as cardiac tissue, regardless of the apparatus or process used to carry out the ablation. Also, as used herein, "transmural" means through the wall or thickness, such as through the wall or thickness of a hollow organ or vessel.

Ablation of cardiac tissue may be carried out in an open surgical procedure, where the breastbone is divided and

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